Technical Data Sheet

Bridge Identification:	1620310000000B01
Facility Carried:	M 37
Feature Intersected:	Muskegon River
Location:	Newaygo
County:	Newaygo
Region:	Grand
Year Built:	1953
Year Reconstructed:	1987
Bridge Type:	Two-Girder System
No. of Spans:	5
Deck Area:	34,780 S.F.
Paint System:	Type 4
Paint Area:	97,000 S.F.

Plan View Looking South (1)

West Elevation (2)

Fracture Critical Members
1. Pin and Hanger Assemblies 2. Tension Areas of Main Girders

Fatigue Sensitive Details
1. Floorbeam-to-Girder Connections 2. Lateral Bracing-to-Girder Connections

General Bridge Description

Bridge B01 of 62031 is a five-span, steel, two-girder-system bridge carrying Michigan State Route 37 over the Muskegon River in the village of Newaygo in Newaygo County. The spans measure 98'-6", 118'-0", 122'-0", 118'-0", and 98'-6" from west to east, and the overall length of the bridge is 555'-0". The out-to-out width of the deck is 62'-10". A 2" open longitudinal joint along the centerline of the bridge separates the superstructure into two halves, each providing for two 12'-0" travel lanes with a 5'-0" sidewalk. The bridge is supported by reinforced concrete abutments and rigid frame piers.

The floor system is comprised of longitudinal stringers and transverse floorbeams that frame into the two main riveted girders along either edge of the eastbound and westbound roadways. Spans 2 and 4 each contain a 62'-0" suspended span supported by pin and hanger assemblies at the end of the girders cantilevered from Spans 1, 3, and 5.

The bridge was built in 1953 and was rehabilitated in 1987, when the pins and hangers for the non-redundant suspended spans were replaced, the bridge deck joints were replaced, and the bridge susperstructure was painted. The bridge is scheduled for a deck replacement in the year 2001.

West Elevation (3)

Inspection Checklists

For additional information and detailed inspection procedures, refer to the Inspection and Maintenance Program section of this manual.

Fracture-Critical Members/Fatigue-Sensitive Details

! **Pin and hanger assemblies.** (Photo 3)

Typical Pin and Hanger Assembly (3)

! **Tension areas of main girders.** See Figure 1 in the Inspection and Maintenance Program section of this manual for tension areas.

! **Girder webs at floorbeam connections.**

Typical Connection of Floorbeam to Girder (4)

! **Lateral bracing gusset plates at floorbeam connections.**

Lateral Bracing at Floorbeam Connection (5)

Other

! **Bearing assemblies.** The bearings at Piers 1 and 4 appear to be excessively inclined for ambient temperature and should be monitored.

Typical Inclined Rocker Bearing at Pier (6)

Maintenance Recommendations

Regularly Scheduled Maintenance Items

Recommendation	Schedule
Clean bridge drainage system components (deck drains and downspouts).	6 to 12 months
Flush bridge deck joints and check for leaks.	12 months
Powerwash bridge superstructure.	12 months

Powerwash bearings and pin and hanger assemblies.	12 months